

	L #	Hits	Search Text	DBs
1	L1	79	(krill or fish) and phytase	USPAT
2	L2	271	(krill or fish) same hydrolysate	USPAT
3	L3	10	12 and cereal and (phytase or amylase or protease or cellulase)	USPAT
4	L4	19	(krill or fish) adj hydrolysate	USPAT
5	L5	6	14 and (phytase or amylase or protease or hemicellulase or cellulase or xylanase)	USPAT
6	L6	2	(krill or fish) adj hydrolyzate	USPAT
7	L8	288	hydrolyzate and (amylase or protease or hemicellulase or cellulase or xylanase) and (soy or canola or oats or wheat or rye or triticales or peas or barley or sorghum)	USPAT
8	L7	98	hydrolyzate and (amylase or protease or hemicellulase or cellulase or xylanase) and cereal	USPAT
9	L9	36	hydrolyzate and (protease or hemicellulase or cellulase or xylanase) and cereal	USPAT
10	L10	4	hydrolyzate and (amylase or protease or hemicellulase or cellulase or xylanase) and cereal and phytic	USPAT
11	L11	90	17 and (blend or mixture)	USPAT
12	L12	4	111 and phytic	USPAT
13	L13	274	18 and (blend or mixture)	USPAT
14	L15	5	114 and phyt\$3	USPAT
15	L14	113	113 and 426/\$.cccls.	USPAT
16	L16	28	114 and protein adj hydrolyzate	USPAT

	L #	Hits	Search Text	DBs
17	L17	65	(protein or animal or fish) adj (hydrolyzate or hydrolysate) and (amylase or protease or hemicellulase or cellulase or xylanase) and cereal	USPAT
18	L18	23	(fish or animal) adj (hydrolyzate or hydrolysate)	USPAT
19	L19	23	(fish or animal or krill) adj (hydrolyzate or hydrolysate)	USPAT
20	L20	26	(fish or animal or krill) adj (hydrolyzate or hydrolysate)	EPO; JPO; DERWEN T
21	L21	0	wo-2001078521-\$.did.	EPO; JPO; DERWEN T
22	L22	0	wo-1078521-\$.did.	EPO; JPO; DERWEN T
23	L23	0	wo-0178521-\$.did.	EPO; JPO; DERWEN T
24	L24	13	(protein or animal or fish) adj (hydrolyzate or hydrolysate) and phytase	USPAT
25	L25	1	6284502.pn.	USPAT
26	L26	0	(protein or animal or fish) adj (hydrolyzate or hydrolysate) and phytase	EPO; JPO; DERWEN T
27	L27	492	(protein or animal or fish) adj (hydrolyzate or hydrolysate) and (amylase or protease or hemicellulase or cellulase or xylanase or phytase)	USPAT
28	L28	272	127 and (soy or canola or oats or wheat or rye or triticale or peas or barley or sorghum)	USPAT
29	L29	100	128 and feed	USPAT

	Type	L #	Hits	Search Text	DBs	Time Stamp
30	BRS	L30	182	(protein or animal or fish) adj (hydrolyzate or hydrolysate) and (amylase or protease or hemicellulase or cellulase or xylanase or phytase)	EPO; JPO; DERWEN T	2002/03/27 16:30
31	BRS	L31	28	130 and (soy or canola or oats or wheat or rye or triticale or peas or barley or sorghum)	EPO; JPO; DERWEN T	2002/03/27 16:31

	Comments	Error Definition	Errors
30			0
31			0

=> d 1-3 bib ab

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2001:780604 CAPLUS
DN 135:303142
TI Dephytinization of plant-based products in feed mixtures with
high-moisture animal, plant or microbial byproducts
IN Maenz, David D.; Classen, Henry L.; Newkirk, Rex W.
PA University of Saskatchewan Technologies Inc., Can.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001078521	A2	20011025	WO 2001-CA535	20010419
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2000-198320P P 20000419

AB Dry plant-based products (e.g., fat-extd. meals as a result of processing soybean, canola (rapeseed), sunflower, cottonseed, peanut and other seeds; whole seeds such as peas, beans, and cereal grains; plant-based byproducts such as rice bran, wheat bran, corn gluten meal; and all other plant-based products used in diet formulation) are combined with high-moisture animal, plant or microbial byproducts (e.g., animal byproducts such as macerated portions or whole carcasses from animals such as fish, poultry, swine or cattle and byproducts of the dairy industry such as whey; plant byproducts such as corn gluten meal and corn gluten feed; and microbial byproducts such as distillers thins from the brewing and distg. industries). The mixt. is treated with phytase to dephytinize the plant-based products. Thus, rapeseed meal fines are combined with fish hydrolyzate and incubated with phytase at 50.degree. for .ltoreq.180 min. Optionally, a chelating agent such as citric acid or EDTA can be added to improve the efficiency of the reaction.

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 1980:109450 CAPLUS
DN 92:109450
TI Stabilizing lipid complex from oats and its derivatives
IN Henry, Michel
PA Autolysats Francais, Fr.
SO Belg., 8 pp.
CODEN: BEXXAL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 877026	A1	19791001	BE 1979-195780	19790615
	FR 2428402	A1	19800111	FR 1978-17950	19780615
	FR 2428402	B1	19830415		
	DE 2924034	A1	19791220	DE 1979-2924034	19790613
	ES 481569	A1	19800116	ES 1979-481569	19790613
	NL 7904705	A	19791218	NL 1979-4705	19790615
PRAI	FR 1978-17950		19780615		

AB Hydrolyzates of animal or vegetable protein are incorporated by absorption and adsorption into oat grains or rolled oats; components of the

hydrolyzates interact with the starch and lipids of oat and protect the lipids and vitamins from lipolytic and oxidative changes. The product obtained is used as animal feed. Thus, a hydrolyzate was obtained by enzymic digestion of fresh marine fish with enzymes of the fish as well as exogenous proteases (e.g. papain). Oils were partially removed by centrifugation and filtration so that the hydrolyzate contained 2-10% lipid on a dry wt. basis. The approx. compn. of the N fraction after 4-6 h of hydrolysis at 50-55 degree., pH 4.5-6.0 was total N 13, proteoses and peptones 4, low-mol.-wt. polypeptides 3.5, free amino acids 4.5, and other fractions 1% of the dry ext. Whole or freshly hulled oats (100 kg) were mixed with 5 kg of fish hydrolyzate and 15 L of water until the hydrolyzate was completely absorbed or adsorbed by the grain; the mixt. was then brought to 9-10% humidity. Use of an acid and enzymic hydrolyzate of lacto- or soybean protein is also described, as is the addn. of antifungal agents, antioxidants, and vitamins, amino acids, and trace elements to hydrolyzates.

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 1973:96103 CAPLUS

DN 78:96103

TI Prospects for nonconventional protein resources

AU Spensley, P. C.; Halliday, D.; Orr, Elizabeth

CS Trop. Prod. Inst., London, Engl.

SO Trop. Sci. (1972), 14(3), 203-33

CODEN: TROSAC

DT Journal; General Review

LA English

AB A review. Edible protein concs. can be produced from oilseed, cereal milling by-products, fish (FPC), leaves (LPC), and microorganisms (SCP). Soybeans have been used as a traditional oriental food, as an additive to bread, to prep. milk-like beverages, and to construct textured meat analogs. A bland FPC has not been produced economically but flavored FPC and fish hydrolyzates are possible. LPC and SCP will probably first be used as animal feed ingredients. 52 refs.

L9 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2002 ACS
 AN 1978:458544 CAPLUS
 DN 89:58544
 TI Seasonings
 IN Noda, Minoru; Noguchi, Masatoshi; Asao, Yasuo
 PA Kikkoman Shoyu Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53041494	A2	19780414	JP 1976-115470	19760928
	JP 56000017	B4	19810106		

AB Extn. residue of fish and shellfish is hydrolyzed by an enzyme, mixed with
 sugars and dried fish and shellfish, and heated to prep. a seasoning.
 Thus, 2 kg wheat and Aspergillus oryzae and 14L hot water
 (55.degree.) were mixed with 2 kg fish meal and held at 55.degree. for 15
 h. The hydrolyzate was mixed with 2.3 kg NaCl and filtered. The filtrate
 (10 L) was mixed with 1 kg sugar and 0.3 kg niboshi (boiled and dried
 fish) powder, heated at 85.degree. for 30 min, and spray-dried to yield
 3.4 kg seasoning.

=> d his

(FILE 'HOME' ENTERED AT 14:59:31 ON 27 MAR 2002)

FILE 'AGRICOLA, BIOSIS, BIOTECHNO, CABA, CAPLUS, FOMAD, FOREGE, FROSTI,
FSTA, JICST-EPLUS, PASCAL, PROMT, MEDICONF, NTIS, SCISEARCH, TOXCENTER'
ENTERED AT 14:59:36 ON 27 MAR 2002

L1	0 S KRILL (W) HYDROLYZATE AND CEREAL
L2	3 S FISH HYDROLYZATE AND CEREAL
L3	29 S KRILL HYDROLYSATE
L4	146 S FISH HYDROLYSATE
L5	10 S KRILL HYDROLYZATE
L6	85 S FISH HYDROLYZATE
L7	259 S L3 OR L4 OR L5 OR L6
L8	45 S L7 AND (SOY#### OR CANOLA OR OATS OR BARKEY OR RYE OR WHEAT
L9	26 DUP REM L8 (19 DUPLICATES REMOVED)
L10	0 S L7 AND BARLEY
L11	4 S L7 AND (PEAS OR TRITICALE OR SORGHUM OR RAPE#####)
L12	2 DUP REM L11 (2 DUPLICATES REMOVED)
L13	5 S L7 AND CEREAL
L14	5 DUP REM L13 (0 DUPLICATES REMOVED)
L15	1 S L7 AND (PHYTASE OR CELLULASE OR HEMICELLULASE)